FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.	
INFORMATION STATEMENT B	DISCLOSURE	02-326-A (400.046)	10/724,270	
(Use several sheets if	ets if necessary)	Applicant: James McSwiggen		
THE TRUCKS	•	Filing Date:	Group:	
·		November 26, 2003	1635	

U.S. PATENT APPLICATION DOCUMENTS

Examiner Initial		Application Number	Filing Date	Name	Publication Date
JDS	•	08/878,640	06/19/1997	Ludwig et al.	
1	•	60/082,404	04/20/1998	Thompson et al.	
	٠	60/101,174	09/14/1998	Hartmann et al.	
	•	US 2001/0007666	01/05/1999	Hoffman et al.	07/12/01
	•	09/301,511	04/28/1999	Beigelman et al.	
	*	09/476,387	12/30/1999	Beigelman et al.	
	•	09/740,332	12/18/2000	Blatt et al.	
	*	US 2002/0130430	12/29/2000	Castor	09/19/02
	*	09/800,594	03/06/2001	Usman and McSwiggen	
	*	60/292,217	05/18/2001	Adamic et al.	
	•	60/306,883	07/20/2001	Vargeese et al.	
	*	09/918,728	07/31/2001	Beigelman et al.	
	٠	US 2002/0137210	08/09/2001	Churikov	09/26/02
	*	10/201,394	08/13/2001	Vargeese et al.	
	•	60/311,865 `	08/13/2001	Vargeese et al.	
	*	60/358,580	02/20/2002	Beigelman et al.	
V	*	60/362,016	03/06/2002	Matulic-Adamic et al.	

EXAMINER	DATE CONSIDERED
	DATE CONSIDERED

Examiner Initial		Application Number	Filing Date	Name	Publication Date
JDS	•	60/363,124	03/11/2002	Beigelman et al.	
	•	10/151,116	05/17/2002	Matulic-Adamic et al.	
	•	60/386,782	06/06/2002	Beigelman et al.	
	٠	60/402,996	08/13/2002	Usman et al.	
	•	60/406,784	08/29/2002	Beigelman et al.	
	٠	60/408,378	09/05/2002	Beigelman et al.	
	*	60/409,293	09/09/2002	Beigelman et al.	
	•	60/440,129	01/15/2003	Beigelman et al.	
	٠	10/417,012	04/16/2003	McSwiggen et al.	
	٠	10/422,704	04/24/2003	McSwiggen et al.	
	•	10/427,160	04/30/2003	Vargeese et al.	
	•	10/444,853	05/23/2003	McSwiggen et al.	
	٠	10/652,791	08/29/2003	McSwiggen et al.	
	•	10/693,059	10/23/2003	McSwiggen et al.	
	•	10/720,448	11/24/2003	McSwiggen et al.	
	٠	10/727,780	12/03/2003	Vaish et al.	
	٠	60/543,480	02/10/2004	Jadhati et al.	

U.S. PATENT DOCUMENTS

niner Itial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	•	4,987,071	01/22/1991	Cech et al.			
	•	5,108,921	04/28/1992	Low et al.			
	•	5,138,045	08/11/1992	Cook et al.			
	•	5,214,136	05/25/1993	Lin et al.			
	٠	5,270,163	12/14/1993	Gold et al.			
,	٠	5,334,711	08/02/1994	Sproat et al.	·		
	•	5,416,016	05/16/1995	Low et al.			

EXAMINER	DATE CONSIDERED
	<u> </u>

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
JDS	•	5,475,096	12/12/1995	Gold et al.			
<u> </u>	·	5,525,468	06/11/1996	McSwiggen			
	٠	5,589,332	12/31/1996	Shih et al.			
	•	5,599,704	02/04/1997	Thompson et al.			
	•	5,624,803	04/29/1997	Noonberg et al.			
	٠	5,627,053	05/06/1997	Usman et al.			
	·	5,631,359	05/20/1997	Chowrira et al.			
	•	5,631,360	05/20/1997	Usman et al.			
	•	5,633,133	05/27/1997	Long et al.			
	•	5,670,633	09/23/1997	Cook et al.			
	•	5,672,695	09/30/1997	Eckstein et al.			·
	*	5,693,535	12/02/1997	Draper et al.			
	*	5,716,824	02/10/1998	Beigelman et al.			
	*	5,741,679	04/21/1998	George et al.			
	*	5,792,847	08/11/1998	Buhr et al.			
	•	5,804,683	09/08/1998	Usman et al.			
	*	5,807,718	09/15/1998	Joyce et al.			
	•	5,814,620	09/29/1998	Robinson et al.			
	٠	5,831,071	11/03/1998	Usman et al.			··-
	•	5,834,186	11/10/1998	George et al.			
	*	5,849,902	12/15/1998	Arrow et al.			
	•	5,854,038	12/29/1998	Sullenger et al.			· · · · · · · · · · · · · · · · · · ·
	*	5,871,914	02/16/1999	Nathan			
	*	5,889,136	03/30/1999	Scaringe et al.			
	•	5,898,031	04/27/1999	Crooke			
	*	5,902,880	05/11/1999	Thompson et al.			
V	٠	5,910,583	06/08/1999	Marks et al.			

EXAMINER	DATE CONSIDERED

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
JDS	•	5,968,748	10/19/1999	Bennett et al.			
	•	5,972,704	10/26/1999	Draper et al.			
	•	5,989,912	11/23/1999	Arrow et al.			
	•	5,998,203	12/07/1999	Adamic et al.			
	•	6,001,311	12/14/1999	Brennan			
	•	6,005,087	12/21/1999	Cook et al.			
	•	6,008,400	12/28/1999	Scaringe et al.			
	•	6,054,299	04/25/2000	Conrad			
	•	6,054,576	04/25/2000	Bellon et al.			
	•	6,057,156	05/02/2000	Akhtar et al.			
	•	6,107,062	08/22/2000	Hu et al.			,
	•	6,107,094	08/22/2000	Crooke			
	*	6,111,086	08/29/2000	Scaringe et al.			
	*	6,117,657	09/12/2000	Usman et al.			
	*	6,127,173	10/03/2000	Eckstein et al.			
	•	6,146,886	11/14/2000	Thompson et al.			
	•	6,153,737	11/28/2000	Manoharan et al.			
	*	6,159,692	12/12/2000	Draper et al.			
	*	6,159,714	12/12/2000	Usman et al.			
	*	6,162,909	12/19/2000	Bellon et al.			
	*	6,168,778	01/02/2001	Janjic et al.			
	•	6,180,613	01/30/2001	Kaplitt et al.			
	•	6,235,310	05/22/2001	Wang et al.			
	*	6,235,886	05/22/2001	Manoharan et al.			
	•	6,248,878	06/19/2001	Adamic et al.			
	•	6,300,074	10/09/2001	Gold			
V	*	6,303,773	10/16/2001	Bellon et al.			

EXAMINER	DATE CONSIDERED

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
JDS	*	6,335,434	01/01/2002	Guzaev et al.			
<u> </u>	•	6,353,098	03/05/2002	Usman et al.			
	•	6,362,323	03/26/2002	Usman et al.			
	٠	6,372,427	04/16/2002	Kandimalla et al.			
	•	6,395,492	05/28/2002	Manoharan et al.			
	•	6,395,713	05/28/2002	Beigelman et al.			
	•	6,437,117	08/20/2002	Usman et al.			
	•	6,447,796	09/10/2002	Vook et al.			
	•	6,469,158	10/22/2002	Usman et al.			
	٠	6,476,205	11/05/2002	Buhr et al.			
	•	6,528,631	03/04/2003	Cook et al.			
	•	6,506,559	06/14/2003	Fire et al.			
	•	6,586,524	07/01/2003	Sagara			
	*	6,617,156	09/09/2003	Doucette-Stam et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Trans	lation
							Yes	No
	•	88/09810	12/15/1988	WO (Tullis et al.)				
	*	89/02439	03/23/1989	WO (Arnold et al.)				
	*	0 360 257	03/28/1990	EP (Hampel et al.)				
	*	90/12096	10/18/1990	WO (Low et al.)				
		90/14090	11/29/1990	WO (Gillespie et al.)				
	*	91/03162	03/21/1991	WO (Rossi et al.)				
	*	91/18913	12/12/1991	WO (Scanlon et al.)				
	*	91/18625	12/12/1991	WO (Scanlon et al.)				
V	*	91/18624	12/12/1991	WO (Scanlon et al.)				

EXAMINER	DATE CONSIDERED

Sheet 6 of 34

			Document Number	Date	Country	Class	Subclass	Trans	lation
								Yes	No
JDS		*	92/00080	01/09/1992	WO (Reddy et al.)				
		*	92/07065	04/30/1992	WO (Eckstein et al.)				
		*	93/15187	08/05/1993	WO (Usman et al.)				
		*	93/23569	11/25/1993	WO (Draper et al.)				
		*	93/23057	11/25/1993	WO (Thompson and Draper)				
			94/01550	01/20/1994	WO (Agrawal et al.)				
		*	94/02595	02/03/1994	WO (Sullivan et al.)				
		*	95/04818	02/16/1995	WO (Draper et al.)				
		٠	95/06731	03/09/1995	WO (Usman et al.)				
		*	95/11304	04/27/1995	WO (Usman et al.)				
		*	95/11910	05/04/1995	WO (Dudycz et al.)				
		+	95/13380	05/18/1995	WO (Draper et al.)				
		*	95/23225	08/31/1995	WO (Stinchcomb et al.)				
		*	96/10392	04/11/1996	WO (Holland et al.)				
		*	96/10391	04/11/1996	WO (Choi et al.)				
		*	96/10390	04/11/1996	WO (Ansell et al.)				 .
	ĺ	*	96/18736	06/20/1996	WO (Beigelman et al.)				
		*	96/22689	08/01/1996	WO (Pyle et al.)				
		*	97/26270	07/24/1997	WO (Beigelman et al.)				
		*	808 898	11/26/1997	EP (Uhlmann et al.)				
		*	98/13526	04/02/1998	WO (Woolf et al.)				
		*	98/27104	06/25/1998	WO (Breaker et al.)			·	
		•	98/28317	07/02/1998	WO (Matulic-Adamic et al.)				
		*	98/43993	10/08/1998	WO ((Breaker et al.)				
	,]	•	98/58058	12/23/1998	WO (Ludwig & Sproat)				,
V		*	99/05094	02/04/1999	WO (Beigelman et al.)				

EXAMINER	DATE CONSIDERED

		Document Number	Date	Country	Class	Subclass	Trans	lation
							Yes	No
JDS	•	99/04819	02/04/1999	WO (Klimuk)				
1	*	99/07409	02/18/1999	WO (Deschamps de Paillette et al.)				 -
	*	99/14226	03/25/1999	WO (Wengel et al.)				
	+	99/17120	04/08/1999	WO (Davis and Bishop)				
	*	99/16871	04/08/1999	WO (Eckstein et al.)			,	
	*	99/29842	06/17/1999	WO (Sullenger et al.)				
		99/31262	06/24/1999	WO (Barry et al.)				
	*	99/31118	06/24/1999	WO (Czubayko and Wellstein)			-	
	*	99/32619	07/01/1999	WO (Fire et al.)				
	*	99/45146	09/10/1999	WO (Todd et al.)				
	+	99/49029	09/30/1999	WO (Graham et al.)				
	*	99/50452	10/07/1999	WO (Todd et al.)				
	+	99/53050	10/21/1999	WO (Waterhouse et al.)				
	*	99/54459	10/28/1999	WO (Thompson et al.)				
	*	99/55857	11/04/1999	WO (Beigelman et al.)				
	•	99/61631	12/02/1999	WO (Heifetz et al.)				
	•	99/66063	12/23/1999	WO (Manoharan et al.)				
	•	00/01846	01/13/2000	WO (Plaetinck et al.)				
	•	00/17369	03/30/2000	WO (Gurney et al.)	17.00		-	
	*	00/22113	04/20/2000	WO (Skillern)				
	•	00/22114	04/20/2000	WO (Conrad et al.)			_	
	*	00/24931	05/04/2000	WO (Nathan and Ellington)				
	•	00/26226	05/11/2000	WO (Breaker et al.)				
	*	00/44895	08/03/2000	WO (Kreutzer et al.)				
	*	00/44914	08/03/2000	WO (Li et al.)				
V	•	2,359,180	08/03/2000	CA (Kreutzer et al.)				•

EXAMINER	DATE CONSIDERED

		Document Number	Date	Country	Class	Subclass	Trans	lation
							Yes	No
JDS	*	00/49035	08/24/2000	WO (Sheen)				
	•	00/53722	09/14/2000	WO (O'Hare & Normand)		:		
	•	00/63364	10/26/2000	WO (Pachuk et al.)			•	
	•	00/66604	11/09/2000	WO (Wengel et al.)				
		199 25 052	12/07/2000	DE (Cherkasky et al.)				
	*	01/04313	01/18/2001	WO (Satishchandran et al.)				
	+	01/16312	03/08/2001	WO (McSwiggen et al.)				
		2001240375	03/16/2001	AU (Graham et al.)				
	*	01/29058	04/26/2001	WO (Mello et al.)				
	•	01/36646	05/25/2001	WO (Zernicka-Goetz et al.)				
	•	01/92513	05/29/2001	WO (Ardnt et al.)			-	
	•	01/38551	05/31/2001	WO (Grossniklaus)				
	*	01/42443	06/14/2001	WO (Churikov et al.)				Х
	•	01/49877	07/12/2001	WO (Todd)				
	•	01/49844	07/12/2001	WO (Driscoll et al.)				
	•	01/53475	07/26/2001	WO (Cogoni et al.)				
	•	01/68836	09/20/2001	WO (Beach et al.)				
	•	01/70949	09/27/2001	WO (Graham et al.)				
	•	01/70944	09/27/2001	WO (Honer et al.)				
	*	01/72774	10/04/2001	WO (Deak et al.)		· · · · · · · · · · · · · · · · · · ·		- · ·
	*	01/75164	10/11/2001	WO (Tuschl et al.)		-		
	•	01/96584	12/20/2001	WO (Mushegian et al.)				
	*	1 144 623 B1	01/29/2002	EP (Kreutzer et al.)				
	•	02/15876	02/28/2002	WO (Beigelman et al.)				
	•	02/22636	03/21/2002	WO (Bennett et al.)				
V	•	02/38805	05/16/2002	WO (Echeverri et al.)				

EXAMINER	DATE CONSIDERED

			Document Number	Date	Country	Class	Subclass	Trans	lation
								Yes	No
JI)S	•	02/44321	06/06/2002	WO (Tuschl et al.)	1			
		*	02/55693	07/18/2002	WO (Kreutzer et al.)				
		*	02/55692	07/18/2002	WO (Kreutzer et al.)				
		*	02/094185	11/28/2002	WO (Beigelman et al.)				
		•	03/05028	02/20/2003	WO (McSwiggen et al.)	-			
		•	03/05346	02/20/2003	WO (McSwiggen et al.)				
		•	03/024420	03/27/2003	WO (Ahlheim et al.)				
		•	03/046185	06/05/2003	WO (Wang et al.)				
		•	03/047518	06/12/2003	WO (Wang et al.)				
		*	03/064626	08/07/2003	WO (Woolf et al.)				
		•	03/064625	08/07/2003	WO (Woolf et al.)				
		٠	03/070918	08/28/2003	WO (McSwiggen et al.)				
		٠	03/074654	09/12/2003	WO (McSwiggen et al.)				
		•	04/013280	02/12/2004	WO (Davidson et al.)				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

		*	Abramovitz et al., "Catalytic Role of 2'-Hydroxyl Groups Within a Group II Intron Active Site," Science 271:1410-1413 (1996)
		*	Adah et al., "Chemistry and Biochemistry of 2',5'-Oligoadenylate-Based Antisense Strategy," Current Medicinal Chemistry, 8, 1189-1212 (2001)
		*	Akhtar and Juliano, "Cellular Uptake and Intracellular Fate of AntiSense Oligonucleotides," Trends Cell Biol. 2:139-144 (1992)
		*	Aldrian-Herrada et al., "A peptide nucleic acid (PNA) is more rapidly internalized in cultured neurons when coupled to a retro-inverso delivery peptide. The antisense activity depresses the target mRNA and protein in magnocellular oxytocin neurons," Nucleic Acids Research 26:4910-4916 (1998)
		*	Allshire, "RNAi and Heterochromatin - A Hushed-up Affair," Science 297:1818-1819 (2002)
		*	Andrews and Faller, "A rapid micropreparation technique for extraction of DNA-binding proteins from limiting numbers of mammalian cells," Nucleic Acids Research 19:2499 (1991)
\	1	*	Antopolsky et al., "Peptide-Oligonucleotide Phosphorothioate Conjugates with Membrane Translocation and Nuclear Localization Properties," Bioconjugate Chem. 10:598-606 (1999)

EXAMINER	DATE CONSIDERED

JI	os	•	Arap et al., "Cancer Treatment by Targeted Drug Delivery to Tumor Vasculature in a Mouse Model," Science 279:377-380 (1998)
		*	Baenziger and Fiete, "Galactose and N-Acetylgalactosamine-Specific Endocytosis of Glycopeptides by Isolated Rat Hepatocytes," Cell 22:611-620 (1980)
		•	Bahramian et al., "Transcriptional and Posttranscriptional Silencing of Rodent α1(I) Collagen by a Homologous Transcriptionally Self-Silenced Transgene," Molecular and Cellular Biology, 19:274-283 (1999)
		*	Banerjee and Turner, "The Time Dependence of Chemical Modification Reveals Slow Steps in the Folding of a Group I Ribozyme," Biochemistry 34:6504-6512 (1995)
		•	Bannai et al., "Effect of Injection of Antisense of Oligodeoxynucleotides of GAD Isozymes into Rat Ventromedial Hypothalamus on Food Intake and Locomotor Activity," Brain Research 784:305-315 (1998)
		*	Bannai et al., "Water-absorbent Polymer as a Carrier for a Discrete Deposit of Antisense Oligodeoxynucleotides in the Central Nervous System," Brain Research Protocols 3:83-87 (1998)
		*	Barbacid, "ras Genes," Annu. Rev. Biochem. 56:779-827 (1987)
		+	Bartel and Szostak, "Isolation of New Ribozymes from a Large Pool of Random Sequences," Science 261:1411-1418 (1993)
		*	Baselga et al., "Recombinant Humanized Anti-HER2 Antibody (HerceptinTM) Enhances the Antitumor Activity of Paclitaxel and Doxorubicin Against HER2/neu Overexpressing Human Breast Cancer Xenografts1," Cancer Research 58:2825-2831 (1998)
		*	Basi et al., "Antagonistic Effects of β-Site Amyloid Precursor Prtein-cleaving Enzymes 1 and 2 on β-Amyloid Peptide Production in Cells*," The Journal of Biological Chemistry, 278, 31512-31520 (2003)
		*	Bass, "Double-Stranded RNA as a Template for Gene Silencing," Cell, 101, 235-238 (2000)
		*	Bass, "The short answer," Nature 411:428-429 (2001)
		*	Beaucage and Iyer, "The Functionalization of Oligonucleotides Via Phosphoramidite Derivatives," Tetrahedron 49:1925-1963 (1993)
		*	Beaudry and Joyce, "Directed Evolution of an RNA Enzyme," Science 257:635-641 (1992)
		*	Beigelman et al., "Chemical Modification of Hammerhead Ribozymes," The Journal of Biological Chemistry 270:24702-25708 (1995)
		*	Bellon et al., "Amino-Linked Ribozymes: Post-Synthetic Conjugation of Half-Ribozymes," Nucleosides & Nucleotides 16:951-954 (1997)
		*	Bellon et al., "Post-synthetically Ligated Ribozymes: An Alternative Approach to Iterative Solid Phase Synthesis," Bioconjugate Chem. 8:204-212 (1997)
		*	Berchuck et al., Overexpression of HER-2/neu is associated with poor survival in advanced epithelial ovarian cancer, Cancer Research 50(13):4087-4091 (1990)
\	/	*	Berkman et al., "Expression of the Vascular Permeability Factor/Vascular Endothelial Growth Factor Gene in Central Nervous System Neoplasms," The Journal of Clinical Investigation, Inc. 91:153-159 (1993)

EXAMINER	DATE CONSIDERED

л	s	*	Berstein et al., "Role for a bidentate ribonuclease in the initiation step of RNA interference," Nature 409:363-366 (2001)
		*	Berzal-Herranz et al., "Essential nucleotide sequences and secondary structure elements of the hairpin ribozyme," EBMO J. 12:2567-2574 (1993)
		*	Berzal-Herranz et al., "In vitro selection of active hairpin ribozymes by sequential RNA-catalyzed clevage and ligation reactions," Genes & Development 6:129-134 (1992)
		*	Bettinger et al., "Size Reduction of Galactosylated PEI/DNA Complexes Improves Lectin-Mediated Gene Transfer into Hepatocytes," Bioconjugate Chem., 10, 558-561 (1999)
		*	Beveridge, "Review of clinical studies of CA 27.29 in breast cancer management," The International Journal of Biological Markers 14(1):36-39 (1999)
		*	Bevilacqua et al., "A Mechanistic Framework for the Second Step of Splicing Catalyzed by the Tetrahymena Ribozyme," Biochemistry 35:648-568 (1996)
		•	Blesch, "Delivery of Neurotrophic Factors to Neuronal Targets: Toward Gene Therapy in the CNS," Drug News & Perspectives 13:269-280 (2000)
		*	Boado et al., "Drug Delivery of Antisense Molecules to the Brain for Treatment of Alzheimer's Disease and Cerebral AIDS," Journal of Pharmaceutical Sciences 87:1308-1315 (1998)
		*	Boado, "Antisense drug delivery through the blood-brain barrier," Advanced Drug Delivery Reviews 15:73-107 (1995)
receptor (IGF1R) is influenced by secondary structure in the IGF1R transcript", Jour		*	Bohula Erin et al., "The Efficacy of small interfering RNAs targeted to the type 1 insulin-like growth factor receptor (IGF1R) is influenced by secondary structure in the IGF1R transcript", Journal of Biological Chemistry, V. 278, 18:15991-15997 (2003)
		•	Bongartz et al., "Improved biological activity of antisense oligonucleotides conjugated to a fusogenic peptide," Nucleic Acids Research 22:4681-4688 (1994)
		*	Bonora et al., "Biological Properties of Antisense Oligonucleotides Conjugated to Different High-Molecular Mass Poly(ethylen glycols)," Nucleosides & Nucleotides 18:1723-1725 (1999)
		*	Bonora et al., "Synthesis and Characterization of High-Molecular Mass Polyethylene Glycol-Conjugated Oligonucleotides," Bioconjugate Chem. 8:793-797 (1997)
		*	Breaker and Joyce, "Inventing and improving ribozyme function: rational design versus iterative selection methods," TIBTECH 12:268-275 (1994)
		*	Breaker et al., "A DNA enzyme with Mg2-dependent RNA phosphoesterase activity," Chemistry & Biology 2(10):655-660 (1995)
		*	Breaker, "Are engineered proteins getting competition from RNA?" Current Opinion in Biotechnology 7:442-448 (1996)
		*	Breaker, "Catalytic DNA: in training and seeking employment," Nature Biotechnology 17:422-423 (1999)
1		•	Brennan et al., "Two-Dimensional Parallel Array Technology as a New Approach to Automated Combinatorial Solid-Phase Organic Synthesis," Biotechnology and Bioengineering (Combinatorial Chemistry) 61:33-45 (1998)

EXAMINER	DATE CONSIDERED

JDS	•	Broaddus et al., "Distribution and stability of antisense phosphorothioate oligonucleotides in rodent brain following direct intraparenchymal controlled-rate infusion," Neurosurg. Focus 3(5): Article 4 (1997)
	•	Brody and Gold, "Aptamers as therapeutic and diagnostic agents," Reviews in Molecular Biotechnology 74:5-13 (2000)
	٠	Brummelkamp et al., "A system for stable expression of short interfering RNAs in mammalian cells", Science V.296, 5567:550-553 (2002)
	*	Buckwold et al., "Effects of a Naturally Occurring Mutation in the Hepatitis B Virus Basal Core Promoter on Precore Cene Expression and Viral Replication," Journal of Virology, 5845-5851 (1996)
	*	Burger et al., "Experimental Corneal Neovascularization: Biomicroscopic, Angiographic, and Morphologic Correlation," Cornea 4:35-41 (1985/1986)
	•	Burgin et al., "Chemically Modified Hammerhead Ribozymes with Improved Catalytic Rates," Biochemistry 35:14090-14097 (1996) (volume no mistakenly listed as 6)
	+	Burlina et al., "Chemical Engineering of Rnase Resistant and Catalytically Active Hammerhead Ribozymes," Bioorganic & Medicinal Chemistry 5:1999-2010 (1997)
	*	Caplen Natasha et al., "Specific inhibition of gene expression by small double-stranded RNAs in invertebrate and vertebrate systems", PNAS V.98, 17:9742-9747 (2001)
	*	Carmichael et al., "Silencing viruses with RNA," Nature, Vol. 418:379-380 (2002)
	*	Caruthers et al., "Chemical Synthesis of Deoxyoligonucleotides and Deoxyoligonucleotide Analogs," Methods in Enzymology 211:3-19 (1992)
	*	Cebon et al., "New DNA Modification Strategies Involving Oxime Formation," Aust. J. Chem. 53:333-339 (2000)
	*	Cech, "Ribozymes and Their Medical Implications," JAMA 260:3030-3034 (1988)
	*	Chaloin et al., "Design of Carrier Peptide-Oligonucleotide Conjugates With Rapid Membrane Translocation and Nuclear Localization Properties," BBRC 243:601-608 (1998)
	*	Chang et al., "A ribozyme specifically suppresses transformation and tumorigenicity of Ha-ras-oncogene-transformed NIH/3T 3 cell lines," J. Cancer Res. Clin. Oncol., 123:91-99 (1997)
	*	Chartrand et al., "An oligodeoxyribonucleotide that supports catalytic activity in the hammerhead ribozyme domain," Nucleic Acids Research 23(20):4092-4096 (1995)
	•	Chen et al., "Multitarget-Ribozyme Directed to Cleave at up to Nine Highly Conserved HIV-1 env RNA Regions Inhibits HIV-1 Replication-Potential Effectiveness Against Most Presently Sequenced HIV-1 Isolates," Nucleic Acids Research 20:4581-4589 (1992)
	*	Chiu et al., "siRNA function in RNAi: A chemical modification analysis," RNA, 9:1034-1048 (2003)
Ψ	+	Choi et al., "Effect of Poly(ethylene glycol) Grafting on Polyethylenimine as a Gene Transfer Vector in vitro," Bull. Korean Chem. Soc., 22, 46-52 (2001)

EXAMINER	DATE CONSIDERED

JDS	•	Chowrira et al., "In Vitro and in Vivo Comparison of Hammerhead, Hairpin, and Hepatitis Delta Virus Self-Processing Ribozyme Cassettes," J. Biol. Chem. 269:25856-25864 (1994)	
	*	Chowrira et al., "Novel guanosine requirement for catalysis by the hairpin ribozyme," Nature 354:320-322 (1991)	
	*	Christoffersen and Marr, "Ribozymes as Human Therapeutic Agents," J. Med. Chem. 38:2023-2037 (1995) (also referred to as Christofferson and Marr)	
	*	Christofferson et al., "Application of computational technologies to ribozyme biotechnology products," Journal of Molecular Structure (Theochem) 311:273-284 (1994) (Christoffersen)	
	*	Chun et al., "Effect of infusion of vasoactive intestinal peptide (VIP)-antisense oligodeoxynucleotide into the third cerebral ventricle above the hypothalamic cuprachiasmatic nucleus on the hyperglycemia caused by intracranial injection of 2-deoxy-D-glucose in rats," Neuroscience Letters 257:135-138 (1998)	
	*	Clemens et al., "The Double-Stranded RNA-Dependent Protein Kinase PKR: Structure and Function," Journal of Interferon and Cytokine Research, 17:503-524 (1997)	
	*	Cload and Schepartz, "Polyether Tethered Oligonucleotide Probes," J. Am. Chem. Soc. 113:6324-6326 (1991)	
	*	Collins and Olive, "Reaction Conditions and Kinetics of Self-Cleavage of a Ribozyme Derived From Neurospora VS RNA," Biochemistry 32:2795-2799 (1993)	
	*	Colomer et al., "erbB-2 antisense oligonucleotides inhibit the proliferation of breast carcinoma cells with erbB-2 oncogene amplification," Br.J. Cancer 70:819-825 (1994)	
	*	Connolly et al., "Binding and Endocytosis of Cluster Glycosides by Rabbit Hepatocytes," The Journ. of Biol. Chem. 257:939-945 (1982)	
	*	Conry et al., "Phase I Trial of a Recombinant Vaccinia Virus Encoding Carcinoembryonic Antigen in Metastatic Adenocarcinoma: Comparison of Intradermal versus Subcutaneous Administration," Clinical Cancer Research 5:2330-2337 (1999)	
	*	Cousens et al., "Tyrosine Kinase Receptor with Extensive Homolgy to EGF Receptor Shares Chromosomal Location with neu Oncogene," Science 230:1132-1139, 1985	
	*	Couture and Stinchcomb, "Anti-gene therapy: the use of ribozymes to inhibit gene function," Trends In Genetics 12:510-515 (1996)	
	*	Crooke, "Advances in Understanding the Pharmacological Properties of Antisense Oligonucleotides," Advances in Pharmacology 40:1-49 (1997)	
	*	Crooke, "Antisense Therapeutics," Biotechnology and Genetic Engineering Reviews 15:121-157 (1998)	
	*	Crooke, "Progress in Antisense Technology: The End of the Beginning," Methods in Enzymology 313:3-45 (1999)	
	*	Czubayko et al., "Adenovirus-mediated transduction of ribozymes abrogates HER-2/neu and pleiotrophin expression and inhibits tumor cell proliferation," Gene Therapy 4:943-949 (1997)	
V	*	d'Aldin et al., "Antisense oligonucleotides to the GluR2 AMPA receptor subunit modify excitatory synaptic transmission in vivo," Molecular Brain Research 55:151-164 (1998)	

EXAMINER	DATE CONSIDERED

JDS	•	Daniels et al., "Two Competing Pathways for Self-splicing by Group II Introns: A Quantitative Analysis of in Vitro Reaction Rates and Products," J. Mol. Biol. 256:31-49 (1996)
	*	Defrancq and Lhomme, "Use of an Aminooxy Linker for the Functionalization of Oligodeoxyribonucleotides," Bioorganic & Medicinal Chem. Lett. 11:931-933 (2001)
	•	Delihas et al., "Natural antisense RNA/target RNA interactions: Possible models for antisense oligonucleotide drug design," Nature Biotechnology 15:751-753 (1997)
	•	Detmar et al., "Overexpression of Vascular Permeability Factor/Vascular Endothelial Growth Factor and its Receptors in Psoriasis," J. Exp. Med. 180:1141-1146 (1994)
	*	Diebold et al., "Mannose Polyethylenimine Conjugates for Targeted DNA Delivery into Dendritic Cells*," The Journal of Biological Chemistry, 274, 19087-19094 (1999)
	*	Dreyfus, "Restriction Ribozymes?" Einstein Quarterly Journal of Biology and Medicine 6:92-93 (1988)
	*	Dropulic et al., "Functional Characterization of a U5 Ribozyme: Intracellular Suppression of Human Immunodeficiency Virus Type I Expression," Journal of Virology 66:1432-1441 (1992)
	•	Dryden et al., "The lack of specificity of neuropeptide Y (NPY) antisense oligodeoxynucleotides administered intracerebroventricularly in inhibiting food intake and NPY gene expression in the rat hypothalamus," Journal of Endocrinology 157:169-175 (1998)
	*	Durand et al., "Circular Dichroism Studies of an Oligodeoxyribonucleotide Containing a Hairpin Loop Made of a Hexaethylene Glycol Chain: Conformation and Stability," Nucleic Acids Research 18:6353-6359 (1990)
	*	Duval-Valentin, "Specific inhibition of transcription by triple helix-forming oligonucleotides," Proc. Natl. Acad. Sci. USA 89:504-508 (1992)
	+	Earnshaw et al., "Modified Oligoribonucleotides as Site-Specific Probes of RNA Structure and Function," Biopolymers 48:39-55 (1998)
	•	Edbauer et al., Resenilin and nicastrin regulate each other and determine amyloid β-peptide production via complex formation," PNAS, 99, 8666-8671 (2002)
	*	Egholm et al., "PNA hybridizes to complementary oligonucleotides obeying the Watson-Crick hydrogen-bonding rules," Nature 365:566-568 (1993)
	*	Elbashir et al., "Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells," Nature 411:494-498 (2001)
	*	Elbashir et al., "Functional anatomy of siRNAs for mediating efficient RNAi in Drosophila melanogaster embryo lysate," EMBO J. 20:6877-6888 (2001)
	*	Elbashir et al., "RNA interference is mediated by 21- and 22-nucleotide RNAs," Genes Dev. 15:188-200 (2001)
	*	Elkins and Rossi, "Ch. 2 - Cellular Delivery of Ribozymes," in Delivery Strategies for Antisense Oligonucleotide Therapeutics, edited by Akhtar, CRC Press, pp. 17-220 (1995)
Ψ	•	Elroy-Stein and Moss, "Cytoplasmic Expression System Based on Constitutive Synthesis of Bacteriophage T7 RNA Polymerase in Mammalian Cells," Proc. Natl. Acad. Sci. USA 87:6743-6747 (1990)

EXAMINER	DATE CONSIDERED

JD	s	•	Emerich et al., "Biocompatability of Poly (DL-Lactide-co-Glycolide) Microsheres Implanted Into the Brain," Cell Transplantation 8:47-58 (1999)
		٠	Epa et al., "Downregulation of the p75 Neurotrophin Receptor in Tissue Culture and In Vivo, Using β-Cyclodextrin-Adamantane-Oligonucleotide Conjugates," Antisense and Nucleic Acid Drug Dev. 10:469-478 (2000)
		٠	Erbacher et al., "Transfection and physical properties of various sacccharide, poly(ethylene glycol), and antibody-derivatized polyethylenimines (PEI), The Journal of Gene Medicine, 1, 210-222 (1999) [sometimes incorrectly cited as pages 1-18]
		*	Fava et al., "Vascular Permeability Factor/Endothelial Growth Factor (VPF/VEGF): Accumulation and Expression in Human Synovial Fluids and Rheumatoid Synovial Tissue," J. Exp. Med. 180:341-346 (1994)
		٠	Feldstein et al., "Two sequences participating in the autolytic processing of satellite tobacco ringspot virus complementary RNA," Gene 82:53-61 (1989)
		•	Ferentz and Verdine, "Disulfied Cross-Linked Oligonucleotides," J. Am. Chem. Soc. 113:4000-4002 (1991)
		*	Filion and Phillips, "Toxicity and immunomodulatory activity of liposomal vectors formulated with cationic lipids toward immune effector cells," Biochimica et Biophysica Acta 1329:345-356 (1997)
		•	Findeis, "Stepwise Synthesis of a GalNAc-containing Cluster Glycoside Ligand of the Asialoglycoprotein Receptor," Int. J. Peptide Protein Res. 43:477-485 (1994)
		*	Fire et al., "Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans," Nature 391:806-811 (1998)
		•	Fire et al., "RNA-triggered gene silencing," Trends Genet. 15:358-363 (1999)
		*	Folkman et al., "Long-term Culture of Capillary Endothelial Cells," Proc. Natl. Acad. Sci. USA 76:5217-5221 (1979)
		*	Folkman, Judah, "Tumor Angiogenesis," Advances in Cancer Research 43:175-203 (1985)
		•	Forster and Altman, "External Guide Sequences for an RNA Enzyme," Science 249:783-786 (1990)
		•	Fox, "Targeting DNA with Triplexes," Current Medicinal Chemistry 7:17-37 (2000)
		*	Freier et al., "Improved free-energy parameters for predictions of RNA duplex stability," Proc. Nat. Acad. Sci. USA 83: 9373-9377 (1986)
		*	Funato et al., "Anti-K-ras ribozyme induces growth inhibition and increased chemosensitivity in human colon cancer cells," Cancer Gene Ther., 7(3):495-500 (2000)
		•	Funato et al., "Suppression of H-ras-Mediated Transformation in NIH3T3 Cells by a ras Ribozyme," Biochem. Pharmacol., 48(7):1471-1475 (1994)
		*	Furgeson et al., "Modified Linear Polyethylenimine—Cholesterol Conjugates for DNA Complexation," Bioconjugate Chem., 14, 840-847 (2003)
	/	•	Futami et al., "Induction of apoptosis in HeLa cells with siRNA expression vector targeted against bcl-2," Nucleic Acids Research Supplement, 251-252 (2002)

EXAMINER	DATE CONSIDERED

JE	s	•	Gao and Huang, "Cytoplasmic Expression of a Reporter Gene by Co-Delivery of T7 RNA Polymerase and T7 Promoter Sequence with Cationic Liposomes," Nucleic Acids Research 21:2867-2872 (1993)
		*	GenBank Accession NM_002524 (pg. 1-5)
		*	GenBank Accession NM_004985 (pg. 1-4)
		*	GenBank Accession NM_005343 (pg. 1-2)
		*	GenBank Accession No. AB020693
		*	GenBank Accession No. AF037412
		*	GenBank Accession No. AF063658
		*	GenBank Accession No. AF100308.1
		1,	Genbank Accession No. AJ302647
		*	GenBank Accession No. AJ430458
		*	GenBank Accession No. D00239
		*	GenBank Accession No. D11168
		*	GenBank Accession No. D50483.1
		*	GenBank Accession No. K02121
		*	GenBank Accession No. L24917
		*	GenBank Accession No. L38318
		*	GenBank Accession No. M16248
		*	GenBank Accession No. M31724
		2.	GenBank Accession No. M66437
		*	GenBank Accession No. NC_001345
		*	GenBank Accession No. NC_001347
╛		*	GenBank Accession No. NC_001353
		3.	GenBank Accession No. NC_001482
		*	GenBank Accession No. NC_001563
		4.	GenBank Accession No. NC_001722
		*	GenBank Accession No. NC_001781
\int		*	GenBank Accession No. NM_001285
V	_	*	GenBank Accession No. NM_001982

EXAMINER	DATE CONSIDERED

JD	s	*	GenBank Accession No. NM_002592.1
1		•	GenBank Accession No. NM_002667
		•	GenBank Accession No. NM_002737
		•	GenBank Accession No. NM_003219
		*	Genbank Accession No. NM_003376.1
1		٠	GenBank Accession No. NM_004283
		*	GenBank Accession No. NM_004448
		*	GenBank Accession No. NM_005228
		*	GenBank Accession No. NM_005235
		*	GenBank Accession No. S82227
		•	GenBank Accession No. U51188
		*	GenBank Accession No. U86046
		*	GenBank Accession No. X01087
		*	GenBank Accession No. X02316
	5.		GenBank Accession No. X03363
		*	GenBank Accession No. X07203
		*	GenBank Accession No. X60667
		*	GenBank Accession No. XM_015620
		•	GenBank Accession No. XM_033884
		*	GenBank Accession No. XM_067723
		*	Ghirnikar et al., "Chemokine inhibition in rat stab would brain injury using antisense oligodeoxynucleotides," Neuroscience Letters 247:21-24 (1998)
		*	Giannini et al., "Enzymatic and antisense effects of a specific anti-Ki-ras ribozyme in vitro and in cell culture," Nucleic Acids Res., 27(13):2737-2744 (1999)
		*	Gion et al., "Comparison of the Diagnostic Accuracy of CA27.29 and CA15.3 in Primary Breast Cancer," Clinical Chemistry 45(5):630-637 (1999)
		*	Godbey et al., "Poly(ethylenimine) and its role in gene delivery," Journal of Controlled Release, 60, 149-160 (1999)
	/	*	Godbey et al., "Tracking the intracellular path of poly(ethylenimine)/DNA complexes for gene delivery," Proc. Natl. Acad. Sci. USA, 96, 5177-5181 (1999)

EXAMINER	DATE CONSIDERED

лоs		*	Godwin et al., "The Synthesis of Biologically Active Pteroyloligo-γ-L-Glutamates (Folic Acid Conjugates)," The Journal of Biological Chemistry 247:2266-2271 (1972)
L		*	Gold et al., "Diversity of Oligonucleotide Functions," Annu. Rev. Biochem. 64:763-797 (1995)
		*	Gold, "Axonal Regeneration of Sensory Nerves is Delayed by Continuous Intrathecal Infusion of Nerve Growth Factor," Neuroscience 76:1153-1158 (1997)
		*	Gonzalez et al., "New Class of Polymers for the Delivery of Macromolecular Therapeutics," Bioconjugate Chem., 10:1068-1074 (1999)
		*	Good et al., "Expression of small, therapeutic RNAs in human nuclei," Gene Therapy 4:45-54 (1997)
		*	Grant et al., "Insulin-like growth factor I acts as an angiogenic agent in rabbit cornea and retina: comparative studies with basic fibroblast growth factor," Diabetologia 36:282-291 (1993)
		*	Grasby et al., "Purine Functional Groups in Essential Residues of the Hairpin Ribozyme Required for Catalytic Cleavage of RNA," Biochemistry 34:4068-4076 (1995)
		*	Griffin et al., "Group II intron ribozymes that cleave DNA and RNA linkages with similar efficiency, and lack contacts with substrate 2'-hydroxyl groups," Chemistry & Biology 2:761-770 (1995)
Groothuis and Levy, "The entry of antiviral and antiretroviral drugs into the central nervol NeuroVirology 3:387-400 (1997)		Groothuis and Levy, "The entry of antiviral and antiretroviral drugs into the central nervous system," Journal of NeuroVirology 3:387-400 (1997)	
* Guerrier-Takada et al., "The RNA Moiety of Ribonuclease P Is the Catalytic Subunit of the 35:849-857 (1983)		Guerrier-Takada et al., "The RNA Moiety of Ribonuclease P Is the Catalytic Subunit of the Enzyme," Cell 35:849-857 (1983)	
		•	Guo and Collins, "Efficient trans-cleavage of a stem-loop RNA substrate by a ribozyme derived from Neurospora VS RNA," EMBO J. 14:368-376 (1995)
		*	Habus et al., "A Mild and Efficient Solid-Support Synthesis of Novel Oligonucleotide Conjugates," Bioconjugate Chem. 9:283-291 (1998)
		*	Hagihara et al., "Widespread gene transfection into the central nervous system of primates," Gene Therapy 7:759-763 (2000)
		*	Hall et al., "Establishment and Maintenance of a Heterochromatin Domain," Science 297:2232-2237 (2002)
		*	Hamilton, et al., "A Species of Small Antisense RNA in Posttranscriptional Gene Silencing in Plants," Science, 286:950-952 (1999)
		*	Hammann et al., "Length Variation of Helix III in a Hammerhead Ribozyme and Its Influence on Cleavage Activity," Antisense & Nucleic Acid Drug Development 9:25-31 (1999)
		*	Hammond et al., "An RNA-directed nuclease mediates post-transcriptional gene silencing in Drosophila cells," Nature 404:293-296 (2000)
		•	Hampel and Tritz, "RNA Catalytic Properties of the Minimum (-)sTRSV Sequence," Biochemistry 28:4929-4933 (1989)
		٠	Hampel et al., "'Hairpin' Catalytic RNA Model: Evidence for Helices and Sequence Requirement for Substrate RNA," Nucleic Acids Research 18:299-304 (1990)

EXAMINER	DATE CONSIDERED

JDS	*	Haniu et al., "Characterization of Alzheimer's β-Secretase Protein BACE," The Journal of Biological Chemistry, 275, 21099-21106 (2000)
	•	Harborth et al., "Sequence, Chemical, and Structural Variation of Small Interfering RNAs and Short Hairpin RNAs and the Effect on Mammalian Gene Silencing," Antisense and Nucleic Acid Drug Development, 13:83-105 (2003)
	•	Harris et al., "Identification of phosphates involved in catalysis by the ribozyme RNase P RNA," RNA 1:210-218 (1995)
	*	Hartmann et al., "Spontaneous and Cationic Lipid-Mediated Uptake of Antisense Oligonucleotides in Human Monocytes and Lymphocytes," The Journal of Pharmacology and Experimental Therapeutics 285:920-928 (1998)
	*	Haseloff and Gerlach, "Sequences required for self-catalysed cleavage of the satellite RNA of tobacco ringspot virus," Gene 82:43-52 (1989)
	*	Haseloff and Gerlach, "Simple RNA Enzymes with New and Highly Specific Endoribonuclease Activities," Nature 334:585-591 (1988)
	*	Hegg et al., "Kinetics and Thermodynamics of Intermolecular Catalysis by Hairpin Ribozymes," Biochemistry 34:15813-15828 (1995)
	*	Hermann and Patel, "Adaptive Recignition by Nucleic Acid Aptamers," Science 287:820-825 (2000)
	*	Herschlag and Cech, "Catalysis of RNA Cleavage by the Tetrahymena thermophila Ribozyme. 2. Kinetic Description of the Reaction of an RNA Substrate That Forms a Mismatch at the Active Site," Biochemistry 29:10172-10180 (1990)
	*	Herschlag and Cech, "Catalysis of RNA Cleavage by the Tetrahymena thermophila Ribozyme 1. Kinetic Description of the Reaction of an RNA Substrate Complementary to the Active Site," Biochemistry 29:10159-10171 (1990)
	*	Hertel et al., "A Kinetic Thermodynamic Framework for the Hammerhead Ribozyme Reaction," Biochemistry 33:3374-3385 (1994)
	*	Hertel et al., "Numbering System for the Hammerhead," Nucleic Acids Research 20:3252 (1992)
	*	Ho et al., "Antisense Oligonucleotides for Target Validation in the CNS," Current Opinion in Molecular Therapeutics 1:336-343 (1999)
	*	Hobbs et al., "Development of a Bicistronic Vector Driven by the Human Polypeptide Chain Elongation Factor 1a Promoter for Creation of Stable Mammalian Cell Lines That Express Very High Levels of Recombinant Proteins," Biochem. Biophys. Res. Commun., 252:368-372 (1998)
	*	Hofland and Huang, "Formulation and Delivery of Nucleic Acids," Handbook of Exp. Pharmacol. 137:165-192 (1999)
	*	Hudson et al., "Cellular Delivery of Hammerhead Ribozymes Conjugated to a Transferrin Receptor Antibody," Int'l Jour. of Pharmaceutics 182:49-58 (1999)
V	•	Hung et al., "HER-2/neu-targeting gene therapy — a review," Gene 159:65-71 (1995)

EXAMINER	DATE CONSIDERED

JDS	•	Hunziker et al., "Nucleic Acid Analogues: Synthesis and Properties, in Modern Synthetic Methods," VCH, 331-417 (1995)
	*	Hussain et al., "Identification of a Novel Aspartic Protease (Asp 2) as β-Secretase," Molecular and Cellular Neuroscience, 14, 419-427 (1999)
	•	Hutvagner and Zamore, "A MicroRNA in a Multiple-Turnover RNAi Enzyme Complex," Science 297:2056-2060 (2002)
	•	Hutvagner et al., "A Cellular Function for the RNA-Interference Enzyme Dicer in the Maturation of the let-7 Small Temporal RNA," Science 293:834-838 (2001)
	•	International Search Report for a related PCT application PCT/US03/05190
	•	International Search Report for a related PCT application PCT/US03/05045
	*	International Search Report for PCT/US03/04710 mailed November 18, 2003
	*	International Search Report for PCT/US03/05028 mailed October 17, 2003
	•	International Search Report for PCT/US03/05346 mailed October 17, 2003
	*	International Search Report for the corresponding PCT application PCT/US02/16840
	*	International Search Report from PCT/US2004/011848 mailed November 16, 2004
	*	International Search Report mailed November 19, 2003 for PCT/US03/18911
	*	Ire et al., "Therapeutic Efficacy of an Adenovirus-Mediated Anti-H-ras Ribozyme in Experimental Bladder Cancer," Antisense Nucleic Acid Drug Dev., 9:341-349 (1999)
	*	Irie and Kashani-Sabet, "Adenoviral-Mediated Anti-H-ras Ribozyme for the Treatment of Bladder Cancer," Methods Mol. Med., 11:153-167 (1998)
	*	Irie et al., "Hammerhead Ribozymes as Therapeutic Agents for Bladder Cancer," Mol. Urol. 4(2):61-66 (2000)
	*	Ishiwata et al., "Physical-Chemistry Characteristics and Biodistribution of Poly(ethylene glycol)-Coated Liposomes Using Poly(oxyethylene) Cholesteryl Ether," Chem. Pharm. Bull. 43:1005-1011 (1995) (mistakenly referred to as Ishiwataet)
	*	Ishizaka et al., "Isolation of Active Ribozymes from an RNA Pool of Random Sequences Using an Anchored Substrate RNA," Biochemical and Biophysical Research Communication 214(2):403-409 (1995)
	*	Izant and Weintraub, "Constitutive and Conditional Suppression of Exogenous and Endogeneous Genes by Anti-Sense RNA," Science 229:345-352 (1985)
	*	Jacque et al., "Modulation of HIV-1 replication by RNA interference," Nature, Vol. 418:435-438 (2002)
	*	Jaeger et al., "Improved Predictions of Secondary Structures for RNA," Proc. Natl. Acad. Sci. USA 86:7706-7710 (1989)
V	•	Jarvis et al., "Optimizing the Cell Efficacy of Synthetix Ribozymes," Journal of Biological Chemistry 271:29107-29112 (1996)

EXAMINER	DATE CONSIDERED

JDS	*	Jaschke et al., "Automated Incorporation of Polyethylene Glycol into Synthetic Oligonucleotides," Tetrahedron Letters 34:301-304 (1993)
	*	Jaschke et al., "Synthesis and Properties of Oligodeoxyribonuclotide-polyethylene Glycol Conjugates," Nucleic Acids Research 22:4810-4817 (1994)
	•	Jaschke, "Oligonucleotide-Poly(ethylene glycol) Conjugates: Synthesis, Properties, and Application," American Chemical Society 680:265-283 (1997)
	•	Jayasena, "Aptamers: An Emerging Class of Molecules that Rival Antibodies in Diagnostics," Clinical Chemistry 45:1628-1650 (1999)
	*	Jeffries and Symons, "A Catalytic 13-mer Ribozyme," Nucleic Acids Research 17:1371-1377 (1989) (also referred to as Jefferies)
	*	Jenuwein, "An RNA-Guided Pathway for the Epigenome," Science 297:2215-2218 (2002)
	*	Jolliet-Riant and Tillement, "Drug transfer across the blood-brain barrier and improvement of brain delivery," Fundam. Clin. Pharmacol. 13:16-26 (1999)
	*	Joseph et al., "Substrate selection rules for the hairpin ribozyme determined by in vitro selection, mutation, and analysis of mismatched substrates," Genes & Development 7:130-138 (1993)
	*	Joyce et al., "Amplification, mutation and selection of catalytic RNA," Gene 82:83-87 (1989)
	*	Joyce, "Directed Molecular Evolution," Scientific American 267:90-97 (1992)
	*	Karle et al., "Differential Changes in Induced Seizures After Hippocampal Treatment of Rats with an Antisense Oligodeoxynucleotide to the GABAA Receptor γ2 Subunit," Euro. Jour. of Pharmacology 340:153-160 (1997)
	*	Karpeisky et al, "Highly Efficient Synthesis of 2'-O-Amino Nucleosides And Their Incorporation in Hammerhead Ribozymes," Tetrahedron Letters 39:1131-1134 (1998)
	*	Kashani-Sabet et al., "Reversal of the Malignant Phenotype by an Anti-ras Ribozyme," Antisense Research & Development 2:3-15 (1992)
	*	Kaspareit-Rittinghausen et al., "Animal Model of Human Disease," Am. J. Pathol., 139:693-696 (1991)
	*	Kijima and Scanlon, "Ribozyme as an Approach for Growth Suppression of Human Pancreatic Cancer," Mol. Biotechnol 14:59-72 (2000)
	*	Kim et al., "Inhibition of vascular endothelial growth factor-induced angiogenesis suppresses tumour growth in vivo," Nature 362:841-844 (1993)
	*	Kim et al., "Three-dimensional model of the active site of the self-splicing rRNA precursor of Tetrahymena," Proc. Natl. Acad. Sci. USA 84:8788-8792 (1987)
	*	Kita et al., "Growth inhibition of human pancreatic cancer cell lines by anti-sense oligonucleotides specific to mutated K-ras genes," Init. J. Cancer, 80:553-558 (1999)
	*	Knitt et al., "ph Dependencies of the Tetrahymena Ribozyme Reveal an Unconvential Origin of an Apparent pKa," Biochemistry 35:1560-1570 (1996)
W	*	Koch et al., "Vascular Endothelial Growth Factor," Journal of Immunology 152:4149-4156 (1994)

EXAMINER	DATE CONSIDERED

JDS	*	Koike et al., "Thimet Oligopeptidase Cleaves the Full-Length Alzheimer Amyloid Precursor Protein at a β-Secretase Cleavage Site in COS Cells," J. Biochem., 126, 235-242 (1999)
	*	Kore, et al., "Sequence specificity of the hammerhead ribozyme revisited; the NIH rule", Nucleic Acids Research, 26(18):4116-4120 (1998)
	*	Kronenwett et al., "Oligodeoxyribonucleotide Uptake in Primary Human Hematopoietic Cells is Enhanced by Cationic Lipids and Depends on the Hematopoietic Cell Subset," Blood 91:852-862 (1998)
	•	Kumar and Ellington, "Artificial evolution and natural ribozymes," FASEB J. 9:1183-1195 (1995)
		Kunath et al., "The structure of PEG-modified poly(ethylene imines) influences biodistribution and pharmacokinetics of their complexes with NF-kappaB decoy in mice.," Medline (Pharm Res.) 19(6): 810-817 (6/1/2002)
	*	Kusser, "Chemically modified nucleic acid aptamers for in vitro selections: evolving evolution," Reviews in Molecular Biotechnology 74:27-38 (2000)
	*	Kuwabara et al., "Allosterically Controllable Ribozymes with Biosensor Functions," Current Opinion in Chem. Biol. 4:669-677 (2000)
	*	Lasic and Needham "The 'Stealth' Liposome: A Prototypical Biomaterial," Chemical Reviews 95:2601-2627 (1995)
	*	Lasic and Papahadjopoulos, "Liposomes Revisited," Science 267:1275-1276 (1995)
	•	Lee and Larson, "Modified Liposome Formulations for Cytosolic Delivery of Macromolecules," ACS Symposium Series 752:184-192 (2000)
		Lee and Lee, "Preparation of Cluster Glycosides of N-Acetylgalactosamine That Have Subnanomolar Binding Constants Towards the Mammalian Hepatic Gal/GalNAc-specific Receptor," Glyconjugates J. 4:317-328 (1987)
	*	Lee et al., "Enhancing the Catalytic Repertoire of Nucleic Acids: A Systematic Study of Linker Length and Rigidity," Nucleic Acids Research 29:1565-1573 (2001)
	*	Lee et al., "Expression of Small Interfering RNA's Targeted Against HIV-1 rev Transcripts in Human Cells," Nature Biotechnology 19:500-505 (2002)
	*	Leirdal et al., "Gene silencing in mammalian cells by preformed small RNA duplexes," Biochemical and Biophysical Research Communications, 295, 744-748 (2002)
	*	Lendlein et al., "Biodegradable, Elastic Shape-Memory Polymers for Potential Biomedical Applications," Science, 296, 1673-1676 (2002)
	*	Lepri et al., "Effect of Low Molecular Weight Heparan Sulphate on Angiogenesis in the Rat Cornea after Chemical Cauterization," Journal of Ocular Pharmacology 10:273-281 (1994)
	*	L'Huillier et al., "Cytoplasmic Delivery of Ribozymes Leads to Efficient Reduction in α-Lactalbumin mRNA Levels in C1271 Mouse," EMBO J. 11:4411-4418 (1992)
\forall	*	Li and Altman, "Cleavage by RNase P of gene N mRNA reduces bacteriophage λ burst size," Nucleic Acids Research 24:835-842 (1996)

EXAMINER	DATE CONSIDERED

JDS	•	Li et al., "Thermodynamic and Activation Parameters for Binding of a Pyrene-Labeled Substrate by the Tetrahymena Ribozyme: Docking is Not Diffusion-Controlled and is Driven by a Favorable Entropy Change," Biochemistry 34:14394-14399 (1995)
	*	Lichner et al., "Double-stranded RNA-binding proteins could suppress RNA interference-mediated antiviral defences," Journal of General Virology, 84:975-980 (2003)
	•	Lieber et al., "Stable High-Level Gene Expression in Mammalian Cells by T7 Phage RNA Polymerase," Methods Enzymol. 217:47-66 (1993)
	*	Limbach et al., "Summary: the modified nucleosides of RNA," Nucleic Acids Research 22(12):2183-2196 (1994)
	•	Lin and Matteucci, "A Cytosine Analogue Capable of Clamp-Like Binding to a Guanine in Helical Nucleic Acids," J. Am. Chem. Soc. 120:8531-8532 (1998)
	*	Lin et al., "A Novel mRNA-cRNA Interference Phenomenon for Silencing bcl-2 Expression in Human LNCaP Cells," Biochemical and Biophysical Research Communications, 281, 639-644 (2001)
	•	Lin et al., "Human aspartic protease memapsin 2 cleaves the β -secretase siet of β -amyloid precursor protein," PNAS, 97, 1456-1460 (2000)
	*	Lin et al., "Policing rogue genes," Nature, 402, 128-129 (1999)
	•	Lindgren et al., "Translocation Properties of Novel Cell Penetrating Transportan and Penetratin Analogues," Bioconjugate Chem. 11:619-626 (2000)
	*	Lisacek et al., "Automatic Identification of Group I Intron Cores in Genomic DNA Sequences," J. Mol. Biol. 235:1206-1217 (1994)
	*	Lisziewicz et al., "Inhibition of Human Immunodeficiency Virus Type 1 Replication by Regulated Expression of a Polymeric Tat Activation Response RNA Decoy as a Strategy for Gene Therapy in AIDS," Proc. Natl. Acad. Sci. U.S.A. 90:8000-8004 (1993)
	*	Liu et al., "Cationic Liposome-mediated Intravenous Gene Delivery," J. Biol. Chem. 270(42):24864-24870 (1995)
	*	Liu et al., "Hydrodynamics-based transfection in animals by systemic administration of plasmid DNA," Gene Therapy, 6, 1258-1266 (1999)
	•	Loakes, "The Applications of Universal DNA Base Analogues," Nucleic Acids Research 29:2437-2447 (2001)
	*	Long and Uhlenbeck, "Kinetic characterization of intramolecular and intermolecular hammerhead RNAs with stem II deletions," Proc. Natl. Acad. Sci. USA 91:6977-6981 (1994)
	*	Lüftner et al., "c-erbB-2 in serum of patients receiving fractionated paclitaxel chemotherapy," The International Journal of Biological Markers 14(2):55-59 (1999) (Also spelled Luftner)
$\overline{\Psi}$	*	Ma and Wei, "Enhanced Delivery of Synthetic Oligonucleotides to Human Leukaemic Cells by Liposomes and Immunoliposomes," Leukemia Research 20:925-930 (1996)

EXAMINER	DATE CONSIDERED

JDS	•	Ma et al., "Design and Synthesis of RNA Miniduplexes via a Synthetic Linker Approach. 2. Generation of Covalently Closed, Double-Stranded Cyclic HIV-1 TAR RNA Analogs with High Tat-Binding Affinity," Nucleic Acids Research 21:2585-2589 (1993)
	•	Ma et al., "Design and Synthesis of RNA Miniduplexes via a Synthetic Linker Approach," Biochemistry 32:1751-1758 (1993)
	*	Maher et al., "Kinetic Analysis of Oligodeoxyribonucleotide-Directed Triple-Helix Formation on DNA," Biochemistry 29:8820-8826 (1990)
	*	Martinez et al., "Single-Stranded Antisense siRNAs Guide Target RNA Cleavage in RNAi," Cell 110:563-574 (2002)
	*	Matulic-Adamic et al., "Functionalized Nucleoside 5'-triphosphates for In Vitro Selection of New Catalytic Ribonucleic Acids," Bioorganic & Medicinal Chemistry Letters 10:1299-1302 (2000)
	*	Maurer et al., "Lipid-based systems for the intracellular delivery of genetic drugs," Molecular Membrane Biology 16:129-140 (1999)
	*	McCurdy et al., "Deoxyoligonucleotides with Inverted Polarity: Synthesis and Use in Triple-Helix Formation" Nucleosides & Nucleotides 10:287-290 (1991)
	*	McGarry and Lindquist, "Inhibition of heat shock protein synthesis by heat-inducible antisense RNA," Proc. Natl. Acad. Sci. USA 83:399-403 (1986)
	*	McGuire and Greene, "The neu (c-erbB-2) oncogene," Seminars in Oncology 16(2):148-155 (1989)
	+	McKay, "Structure and function of the hammerhead ribozyme: an unfinished story," RNA 2:395-403 (1996)
		McManus et al., "Gene Silencing Using Micro-RNA Designed Hairpins," RNA 8:842-850 (2002)
	*	Mesmaeker et al, "Novel Backbone Replacements for Oligonucleotides," American Chemical Society, pp. 24-39 (1994)
	•	Michel and Westhof, "Slippery substratrates," Nat. Struct. Biol. 1:5-7 (1994)
	+	Michel et al., "Structure and Activities of Group II Introns," Annu. Rev. Biochem. 64:435-461 (1995)
	*	Michels and Pyle, "Conversion of a Group II Intron into a New Multiple-Turnover Ribozyme that Selectively Cleaves Oligonucleotides: Elucidation of Reaction Mechanism and Structure/Function Relationships," Biochemistry 34:2965-2977 (1995)
	•	Milligan and Uhlenbeck, "Synthesis of Small RNAs Using T7 RNA Polymerase," Methods Enzymol. 180:51-62 (1989)
	•	Milner et al., "Selecting effective antisense reagents on combinatorial oligonucleotide arrays," Nature Biotechnology 15:537-541 (1997)
	•	Miyagashi and Taira, "U6 Promoter-driven siRNAs with Four Uridine 3' Overhangs Efficiently Suppress Targeted Gene Expression in Mammalian Cells," Nature Biotechnology 19:497-500 (2002)
V	•	Mohr et al., "A tyrosyl-tRNA synthetase can function similarly to an RNA structure in the Tetrahymena ribozyme," Nature 370:147-150 (1994)

EXAMINER	DATE CONSIDERED

JDS * Moore and Sharp, "Site-Specific Modification Science 256:992-996 (1992)		*	Moore and Sharp, "Site-Specific Modification of Pre-mRNA: The 2'-Hydroxyl Groups at the Splice Sites," Science 256:992-996 (1992)
		 Mori et al., "Pigment epithelium-derived factor inhibits retinal and choroidal neovascularization," J. Cellular Physiology, 188(2):253-263 (2001) 	
		•	Morris et al., "A New Peptide Vector for Efficient Delivery of Oligonucleotides into Mammalian Cells," Nucleic Acids Research 25:2730-2736 (1997)
		*	Mukhopadhyay et al., "Antisense Regulation of Oncogenes in Human Cancer," Critical Reviews in Oncogenesis 7:151-190 (1996)
		*	Nakamaye and Eckstein, "AUA-Cleaving Hammerhead Ribozymes: Attempted Selection for Improved Cleavage," Biochemistry 33:1271-1277 (1994)
		*	Nathans and Smith, "Restriction Endonucleases in the Analysis and Restructuring of DNA Molecules," Ann. Rev. Biochem. 44:273-293 (1975)
		*	NCI PDQ/Treatment/Patients/Breast Cancer: http://cancernet.nci.nih.gov/clinpdq/pif/Breast_cancer_Patient.html.
		*	Nishikura, "A Short Primer on RNAi: RNA-directed RNA Polymerase Acts as a Key Catalyst," Cell 107:415-418 (2001)
		*	Nomura et al., "Development of an Efficient Intermediate, α -[2-(Trimethylsilyl) ethoxy]-2-N-[2-trimethylsilyl)ethoxycarbonyl]folic Acid, for the Synthesis of Folate (γ)-Conjugates, and Its Application to the Synthesis of Folate-Nucleoside Conjugates," J. Org. Chem. 65:5016-5021 (2000)
		*	Noonberg et al., "In vivo generation of highly abundant sequence-specific oligonucleotides for antisense and triplex gene regulation," Nucleic Acids Research 22(14):2830-2836 (1994)
		*	Norrby, "Angiogenesis: new aspects relating to its initiation and control," APMIA 105:417-437 (1997)
		*	Noviello et al., "Autosomal Recessive Hypercholesterolemia Protein Interacts with and Regulates the Cell Surface Level of Alzheimer's Amyloid β Precursor Protein*," The Journal of Biological Chemistry, 278, 31843-31847 (2003)
		*	Novina et al., "siRNA-Directed Inhibition of HIV-1 Infection," Nature Medicine 1-6 (2002)
		*	Nykanen et al., "ATP Requirements and Small Interfering RNA Structure in the RNA Interference Pathway," Cell 107:309-321 (2001)
		*	Ohkawa et al., "Activities of HIV-RNA Targeted Ribozymes Transcribed From a 'Shot-Gun' Type Ribozyme-trimming Plasmid," Nucleic Acids Symp. Ser. 27:15-16 (1992)
		•	Ohno-Matsui et al., "Inducible Expression of Vascular Endothelial Growth Factor in Adult Mice Causes Severe Proliferative Retinopathy and Retinal Detachment," Am. J. Pathology, 160:711-719 (2002)
		*	Ohta et al., "H-ras Ribozyme-Mediated Alteration of th eHuman Melanoma Phenotype," Ann. N.Y. Acad. Sci. 716:242-256 (1994)
1	V	*	Ohta et al., "Tissue-specific expression of an anti-ras ribozyme inhibits proliferation of human malignant melanoma cells," Nucleic Acids Res., 24(5):938-942 (1996)

EXAMINER	DATE CONSIDERED

лоs	*	Ojwang et al., "Inhibition of Human Immunodeficiency Virus Type 1 Expression by a Hairpin Ribozyme," Proc. Natl. Acad. Sci. USA 89:10802-10806 (1992)
	*	Oku et al., "Real-time analysis of liposomal trafficking in tumor-bearing mice by use of positron emission tomography," Biochimica et Biophysica Acta 1238:86-90 (1995)
	*	Ono et al., "DNA Triplex Formation of Oligonucleotide Analogues Consisting of Linker Groups and Octamer Segments That Have Opposite Sugar-Phosphate Backbone Polarities," Biochemistry 30:9914-9921 (1991)
	*	O'Reilly et al., "Angiostatin: A Novel Angiogenesis Inhibitor That Mediates the Suppression of Metastases by a Lewis Lung Carcinoma," Cell 79:315-328 (1994)
	*	Orgel, "Selection in vitro," Proc. R. Soc. London B. 205:435-442 (1979)
:	*	Orgis et al., "DNA/polyethylenimine transfection particles: Influence of ligands, polymer size, and PEGylation on internalization and gene expression," AAPS PharmSci., 3 (3) article 21 (http://www.pharmsci.org) p. 1- 11 (2001)
	*	Ormerod et al., "Effects of Altering the Eicosanoid Precursor Pool on Neovascularization and Inflammation in the Alkali-burned Rabbit Cornea," American Journal of Pathology 137:1243-1252 (1990)
	*	Pal-Bhadra et al., "Heterochromatic Silencing and HP1 Localizatin in Drosophila Are Dependent on the RNAi Machinery," Science, 303, 669-672 (2004)
	*	Pan et al., "Probing of tertiary interactions in RNA: 2'-Hydroxyl-base contacts between the Rnase P and pre-tRNA," Proc. Natl. Acad. Sci. USA 92:12510-12514 (1995)
	*	Pandey et al., "Role ov B61, the Ligand for the Eck Receptor Tyrosine Kinase, in TNF-α-Induced Angiogenesis," Science 268:567-569 (1995)
	*	Pardridge et al., "Vector-mediated delivery of a polyamide ("peptide") nucleic acid analogue through the blood-brain barrier in vivo," Proc. Natl. Acad. Sci. USA 92:5592-5596 (1995)
	•	Parrish, "Functional Anatomy of a dsRNA Trigger: Differential Requirement for the Two Trigger Strands in RNA Interference," Molecular Cell 6:1077-1087 (2000)
	*	Passaniti et al., "A Simple, Quantitative Method for Assessing Angiogenesis and Antiangiogenic Agents Using Reconstituted Basement Membrane, Heparin, and Fibroblast Growth Factor," Laboratory Investigation 67:519-528 (1992)
	*	Paul et al., "Effective Expression of Small Interfering RNA in Human Cells," Nature Biotechnology 20:505-508 (2002)
	*	PDQ/Treatment/Health Professionals/Breast Cancer: http://cancernet.nci.nih.gov/clinpdq/soa/Breast_cancer_Physician.html.
	*	Peel and Klein, "Adeno-associated virus vectors: activity and applications in the CNS," Journal of Neuroscience Methods 98:95-104 (2000)
$\overline{\Psi}$	*	Pegram et al, "Phase II Study of Receptor-Enhanced Chemosensitivity Using Recombinant Humanized Anti- p185HER2/neu Monoclonal Antibody Plus Cisplatin in Patients With HER2/nue-Overexpresing Metastatic Breast Cancer Refractory to Chemotherapy Treatment," Journal of Clinical Oncology 16(8):2659-2671 (1998)

EXAMINER	DATE CONSIDERED

JDS	*	Perreault et al., "Mixed Deoxyribo- and Ribo-Oligonucleotides with Catalytic Activity," Nature 344:565-567 (1990) (often mistakenly listed as Perrault).
	*	Perrotta and Been, "A pseudoknot-like structure required for efficient self-cleavage of hepatitis delta virus RNA," Nature 350:434-436 (1991).
	*	Perrotta and Been, "Cleavage of Oligoribonucleotides by a Ribozyme Derived from the Hepatitis δ Virus RNA Sequence," Biochemistry 31:16-21 (1992)
	*	Petersen et al., "Polyethylenimine-graft-Poly(ethylene glycol) Copolymers: Influence of Copolymer Block Structure on DNA Complexation and Biological Activities as Gene Delivery System, Bioconjugate Chem., 13, 845-854 (2002)
	*	Peterson et al., "Future Prospects of Gene Therapy for Treating CNS Diseases," Central Nervous System Diseases Chapter 24:485-508 (2000)
	*	Pieken et al., "Kinetic Characterization of Ribonuclease-Resistant 2'-Modified Hammerhead Ribozymes," Science 253:314-317 (1991)
	*	Pierce et al., "Vascular endothelial growth factor/vascular permeability factor expression in a mouse model of retinal neovascularization," Proc. Natl. Acad. Sci. USA 92:905-909 (1995)
	*	Plate, "Vascular endothelial growth factor is potential tumor angiogenesis factor in human gilomas in vivo," Nature 359:845-848 (1992)
	*	Player and Torrence, "The 2-5A System: Modulation of Viral and Cellular Processes Through Acceleration of RNA Degradation," Pharmacol Ther. 78:55-113 (1998)
	*	Ponpipom et al., "Cell-Specific Ligands for Selective Drug Delivery to Tissues and Organs," J. Med. Chem. 24:1388-1395 (1981)
	*	Praseuth et al., "Triple helix formation and the antigene for sequence-specific control of gene expression," Biochimica et Biophysica Acta 1489:181-206 (1999)
	*	Puttaraju et al., "A circular trans-acting hepatitis delta virus ribozyme," Nucleic Acids Research 21:4253-4258 (1993)
	*	Pyle et al., "Building a Kinetic Framework for Group II Intron Ribozyme Activity: Quantitation of Interdomain Binding and Reaction Rate," Biochemistry 33:2716-2725 (1994)
	*	Rajakumar et al., "Effects of Intrastriatal Infusion of D2 Receptor Antisense Oligonucleotide on Apomorphine-Induced Behaviors in the Rat," Synapse 26:199-208 (1997)
	*	Randall et al., "Clearance of replicating hepatitis C virus replicon RNAs in cell culture by small interfering RNAs," PNAS, 100:235-240 (2003)
		Reinhart and Bartel, "Small RNAs Correspond to Centromer Heterochromatic Repeats," Science 297:1831 (2002)
	*	Reinhart et al., "MicroRNAs in Plants," Genes & Development 16:1616-1626 (2002)
V	*	Richardson and Schepartz, "Tethered Oligonucleotide Probes. A Strategy for the Recognition of Structured RNA," J. Am. Chem. Soc. 113:5109-5111 (1991)

EXAMINER	DATE CONSIDERED

		,	
ъ	s	*	Robertson et al., "Purification and Properties of a Specific Escherichia coli Riobnuclease which Cleaves a Tyrosine Transfer Ribonucleic Acid Precursor," J. Biol. Chem. 247:5243-5251 (1972)
		•	Rodriguez de Paterna et al., "Study of serum tumor markers CEA, CA 15.3 and CA 27.29 as diagnostic parameters in patients with breast carcinoma," The International Journal of Biological Markers 10(1):24-29 (1995)
		•	Ross et al., "The HER-2/neu Oncogene in Breast Cancer: Prognostic Factor, Predictive Factor, and Target for Therapy," The Oncologist 3:237-252 (1998)
			Rossi et al., "Ribozymes as Anti-HIV-1 Therapeutic Agents: Principles, Applications, and Problems," Aids Research and Human Retroviruses 8:183-189 (1992)
		•	Ruoslahti, "RGD and Other Recognition Sequences for Integrins," Annu. Rev. Cell Dev. Biol. 12:697-715 (1996)
		•	Saenger (ed), "Modified Nucleosides and Nucleotides; Nucleoside Di- and Triphosphates; Coenzymes and Antibiotics, (ch.7)" Principles of Nucleic Acid Structure 158-200 (1984)
		*	Salo et al., "Aminooxy Functionalized Oligonucleotides: Preparation, On-Support Derivatization, and Postsynthetic Attachment to Polymer Support," Bioconjugate Chem. 10:815-823 (1999)
		*	Sanghvi et al., "Improved Process for the Preparation of Nucleosidic Phosphoramidites Using a Safer and Cheaper Activator," Organic Process Res. & Dev. 4:175-181 (2000)
		*	Santoro and Joyce, "A general purpose RNA-cleaving DNA enzyme," Proc. Natl. Acad. Sci. USA 94:4262-4266 (1997)
		*	Santoro et al., "Mechanism and Utility of an RNA-Cleaving DNA Enzyme," Biochemistry 37:13330-13342 (1998)
			Santoro et al., "RNA Cleavage by a DNA Enzyme with Extended Chemical Functionality," J. Am. Chem. Soc. 122:2433-2439 (2000)
			Sarver et al., "Ribozymes as Potential Anti-HIV-1 Therapeutic Agents" Science 247:1222-1225 (1990)
		*	Sato et al., "Establishment of a new human pancreatic cancer cell line, NOR-P1, with high angiogenic activity and metastatic potential," Cancer Lett., 155:153-161 (2000)
		•	Saville and Collins, "A Site-Specific Self-Cleavage Reaction Performed by a Novel RNA In Neurospora Mitochondria," Cell 61:685-696 (1990)
		+	Saville and Collins, "RNA-Mediated Ligation of Self-Cleavage Products of a Neurospora Mitochondrial Plasmid Transcript," Proc. Natl. Acad. Sci. USA 88:8826-8830 (1991)
		•	Scanlon et al., "Ribozyme-Mediated Cleavage of c-fos mRNA Reduces Gene Expression of DNA Synthesis Enzymes and Metallothionein," Proc. Natl. Acad. Sci. USA 88:10591-10595 (1991)
		*	Scaringe et al., "Chemical synthesis of biologically active oligoribonucleotides using β-cyanoethyl protected ribonucleoside phosphoramidites," Nucl Acids Res. 18:5433-5441 (1990)
\		•	Scherr et al., "Effective reversal of a transformed phenotype by retrovirus-mediated transfer of a ribozyme directed against mutant N-ras," Gene Ther., 5:1227-1234 (1998)

EXAMINER	DATE CONSIDERED

,		
JDS	5 '	Scherr et al., "Effective reversal of a transformed phenotype by retrovirus-mediated transfer of a ribozyme directed against mutant N-ras," Gene Ther., 6:152 (1999)
		Scherr et al., "Specific Hammerhead Ribozyme-mediated Cleavage of Mutant N-ras mRNA in Vitro and ex Vivo," J. Biol. Chem., 272(22):14304-14313 (1997)
	•	Schmajuk et al., "Antisense Oligonucleotides with Different Backbones," The Journal of Biological Chemistry 274:21783-21789 (1999)
		Schmidt et al., "Base and sugar requirements for RNA cleavage of essential nucleoside residues in internal loop B of the hairpin ribozyme: implications for secondary structure," Nucleic Acids Research 24:573-581 (1996)
	•	Schroeder et al., "Diffusion Enhancement of Drugs by Loaded Nanoparticles in Vitro," Pro. Neuro-Psychopharmacol. & Biol. Psychiat. 23:941-949 (1999)
	•	Schwarz et al., "Evidence that siRNAs Function as Guides, Not Primers, in the Drosophila and Human RNAi Pathways," Molecular Cell 10:537-548 (2002)
	•	Schwarze et al., "In Vivo Protein Transduction: Delivery of a Biologically Active Protein into the Mouse," Science 285:1569-1572 (1999)
	•	Scott et al., "The crystal structure of an All-RNA hammerhead ribozyme: A proposed mechanism for RNA catalytic cleavage," Cell 81:991-1002 (1995)
		Seela and Kaiser, "Oligodeoxyribonucleotides containing 1,3-propanediol as nucleoside substitute," Nucleic Acids Research 15:3113-3129 (1987)
	•	Segarra et al., "Molecular characterization of the Enterococcus faecalis cytolysin activator," Infection and Immunity, 59, 4, 1239-1246 (1991) Database CAPLUS on STN, AN:1992:230597
	•	Senger et al., "Vascular permeability factor (VPF, VEGF) in tumor biology," Cancer and Matastasis Reviews 12:303-324 (1993)
	_	Shabarova et al., "Chemical ligation of DNA: The first non-enzymatic assembly of a biologically active gene," Nucleic Acids Research 19:4247-4251 (1991)
		Sharp et al., "RNAi and double-strand RNA," Genes & Development, 13:139-141 (1999)
	•	Sheehan et al., "Biochemical properties of phosphonoacetate and thiophosphonoacetate oligodeoxyribonucleotides," Nucleic Acids Research, 31 (14), 4109-4118 (2003)
	•	Shweiki et al., "Patterns of Expression of Vascular Endothelial Growth Factor (VEGF) and VEGF Receptors in Mice Suggest a Role in Hormonally Regulated Angiogenesis," J. Clin. Invest. 91:2235-2243 (1993)
	*	Silverman et al., "Selective RNA Cleavage by Isolated RNase L Activated with 2-5A Antisense Chimeric Oligonucleotides," Methods in Enzymology 313:522-533 (1999)
	*	Simantov et al., "Dopamine-Induced Apoptosis in Human Neuronal Cells: Inhibition by Nucleic Acids Antisense to the Dopamine Transporter," Neuroscience 74(1):39-50 (1996)
	' '	Slamon et al., "Human Breast Cancer: Correlation of Relapse and Survival with Amplification of the HER-2/neu Oncogene," Science 235:177-182 (1987)

EXAMINER	DATE CONSIDERED

oncology otent Science and
Science
Science
and
No.
ole-Helix
ibozyme (1996)
eaction
e
NA,"
iency
2:100-
ic
edited by
in place ids

EXAMINER	DATE CONSIDERED

Takahashi et al., "Markedly Increased Amounts of Messenger RNAs for Vascular Endothelial Growth Factor and Placenta Growth Factor in Renal Cell Carcinoma Associated with Angiogenesis," Cancer Research 54:4233-4237 (1994) Tang et al., "Examination of the catalytic fitness of the hammerhead ribozyme by in vitro selection," RNA 3:914-925 (1997) Thomas et al., "Enhancing polyethylenimine's delivery of plasmid DNA into mammalian cells," PNAS, 99, 14640-14645 (2002) Thompson et al., "Improved accumulation and activity of ribozymes expressed from a tRNA-based RNA polymerase III promoter," Nucleic Acids Research 23:2259-2288 (1995) Tokunaga et al., "Ribozyme-mediated inactivation of mutant K-ras oncogene in a colon cancer cell line," Br. J. Cancer, 83(8):833-839 (2000) Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998) Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) Turschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA in Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 98:7053-7058 (1999) Tyler			
* Thomas et al., "Enhancing polyethylenimine's delivery of plasmid DNA into mammalian cells," PNAS, 99, 14840-14845 (2002) * Thompson et al., "Improved accumulation and activity of ribozymes expressed from a tRNA-based RNA polymerase Ill promoter," Nucleic Acids Research 23:2259-2268 (1995) * Tokunaga et al., "Ribozyme-mediated inactivation of mutant K-ras oncogene in a colon cancer cell line," Br. J. Cancer, 83(6):833-839 (2000) * Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998) * Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) * Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) * Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) * Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) * Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) * Turschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) * Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) * Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328)	JDS	•	and Placenta Growth Factor in Renal Cell Carcinoma Associated with Angiogenesis," Cancer Research
Thompson et al., "Improved accumulation and activity of riboxymes expressed from a tRNA-based RNA polymerase III promoter," Nucleic Acids Research 23:2259-2268 (1995) Tokunaga et al., "Ribozyme-mediated inactivation of mutant K-ras oncogene in a colon cancer cell line," Br. J. Cancer, 83(6):833-839 (2000) Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998) Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlnann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		*	
polymerase III promoter," Nucleic Acids Research 23:2259-2268 (1995) * Tokunaga et al., "Ribozyme-mediated inactivation of mutant K-ras oncogene in a colon cancer cell line," Br. J. Cancer, 83(6):833-839 (2000) * Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998) * Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) * Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) * Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) * Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) * Turschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) * Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) * Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlnenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	
Cancer, 83(6):833-839 (2000) Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998) Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328)		*	
* Torrence et al., "Targeting RNA for degradation with a (2'-5') oligoadenylate-antisense chimera," Proc. Natl. Acad. Sci. USA 90:1300-1304 (1993) * Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) * Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) * Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) * Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) * Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) * Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	
Acad. Sci. USA 90:1300-1304 (1993) Tsuchida et al., "Adenovirus-mediated anti-K-ras ribozyme induces apoptosis and growth suppression of human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	Tong et al., "K-ras Ribozyme for Lung Cancer," Methods Mol. Med., 11:209-222 (1998)
human pancreatic carcinoma," Cancer Gene Ther., 7(3):373-383 (2000) * Turner et al., "Improved Parameters for Prediction of RNA Structure," Cold Spring Harbor Symposia on Quantitative Biology Volume LII, pp. 123-133 (1987) * Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) * Turschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) * Turschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) * Turschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		*	
Quantitative Biology Volume LII, pp. 123-133 (1987) Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987) Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		*	
 Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002) Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990) 		*	
Molecular Interventions, 295, 3, 158-167 (2002) * Tuschl et al., "Targeted mRNA Degradation by Double-Stranded RNA In Vitro," Genes & Development 13(24):3191-3197 (1999) * Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the bloodbrain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		*	Turner et al., "Free Energy Increments for Hydrogen Bonds in Nucleic Acid Base Pairs," J. Am. Chem. Soc. 109:3783-3785 (1987)
* Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001) * Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the blood-brain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) * Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) * Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		*	Tuschl et al., "Small Interfering RNAs: A Revolutionary Tool for Analysis of Gene Function and Gene Therapy," Molecular Interventions, 295, 3, 158-167 (2002)
Tuscili, RNA Interierence and Small Interiering RNAs, "Chemblochem 2:239-245 (2001) Tyler et al., "Peptide nucleic acids targeted to the neurotensin receptor and administered i.p. cross the blood-brain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	
brain barrier and specifically reduce gene expression," Proc. Natl. Acad. Sci. USA 96:7053-7058 (1999) Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	Tuschl, "RNA Interference and Small Interfering RNAs," Chembiochem 2:239-245 (2001)
FEBS Letters 421:280-284 (1998) Uhlenbeck, "A Small Catalytic Oligoribonucleotide," Nature 328:596-600 (1987) (this is listed as Nature 327 in the various specifications, but it is actually 328) Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	
the various specifications, but it is actually 328) * Uhlmann and Peyman, "Antisense Oligonucleotides: A New Therapeutic Principle," Chemical Reviews 90:544-584 (1990)		•	Tyler et al., "Specific gene blockade shows that peptide nucleic acids readily enter neuronal cells in vivo," FEBS Letters 421:280-284 (1998)
584 (1990)		•	
 ◆ Usman and Cedergren, "Exploiting the chemical synthesis of RNA," TIBS 17:334-339 (1992) 		•	
	<u>V</u>	<u> </u>	Usman and Cedergren, "Exploiting the chemical synthesis of RNA," TIBS 17:334-339 (1992)

EXAMINER	DATE CONSIDERED

JDS .	•	Usman and McSwiggen, "Ch. 30 - Catalytic RNA (Ribozymes) as Drugs," Annual Reports in Medicinal Chemistry 30:285-294 (1995).
	*	Usman et al., "Automated Chemical Synthesis of Long Oligoribonucleotides Using 2'-O-Silylated Ribonucleoside 3'-O-Phosphoramidites on a Controlled-Pore Glass Support: Synthesis of a 43-Nucleotide Sequence Similar to the 3'-Half Molecule of an Escherichia coli Formylmethoionine tRNA," J. Am. Chem. Soc. 109:7845-7854 (1987).
	*	Usman et al., "Chemical modification of hammerhead ribozymes: activity and nuclease resistance," Nucleic Acids Syposium Series 31:163-164 (1994).
	*	Usman et al., "Hammerhead ribozyme engineering," Current Opinion in Structural Biology 1:527-533 (1996).
	*	Vaish et al., "Isolation of Hammerhead Ribozymes with Altered Core Sequences by in Vitro Selection," Biochemistry 36:6495-6501 (1997).
	•	Vassar et al., "β-Secretase Cleavage of Alzheimer's Amyloid Precursor Protein by the Transmembrane Aspartic Protease BACE," Science 286:735-741 (1999)
	•	Vaughn et al., "Antisense DNA Downregulation of the ERBB2 Oncogene Measured by a Flow Cytometric Assay," Proc. Natl. Acad. Sci. USA 92:8338-8342 (1995)
	*	Ventura et al., "Activation of HIV-Specific Ribozyme Activity by Self-Cleavage," Nucleic Acids Research 21:3249-3255 (1993)
	•	Verdel et al., "RNAi-Mediated Targeting ofHeterochromatin by the RITS Complex, Science, 303, 672-676 (2004)
	*	Verma and Eckstein, "Modified Oligonucleotides: Synthesis and Strategy for Users," Annu. Rev. Biochem. 67:99-134 (1998)
	*	Volpe et al., "Regulation of Heterochromatic Silencing and Histone H3 Lysine-9 Methylation by RNAi," Science 297:1833-1837 (2002)
	*	Wang et al., "Delivery of Antisense Oligodeoxyribonucleotides Against the Human Epidermal Growth Factor Receptor into Cultured KB Cells with Liposomes Conjugated to Folate via Polyethylene Glycol," Proc. Natl. Acad. Sci. USA 92:3318-3322 (1995)
	*	Warashina, et al., "Extremely High and Specific Activity of DNA Enzymes in Cells with a Philadelphia Chromosome, Chemistry & Biology, 6(4):237-250 (1999)
	*	Waterhouse et al., "Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA," Proc. Natl. Acad. Sci. USA, 95, 13959-13964 (1998)
	•	Weerasinghe et al., "Resistance to Human Immunodeficiency Virus Type 1 (HIV-1) Infection in Human CD4+ Lymphocyte-Derived Cell Lines Conferred by Using Retroviral Vectors Expressing an HIV-1 RNA-Specific Ribozyme," Journal of Virology 65:5531-5534 (1994)
	*	Wellstein and Czubayko, "Inhibition of Fibroblast Growth Factors," Breast Cancer Research and Treatment 38:109-119 (1996)
Ψ	•	Werner and Uhlenbeck, "The effect of base mismatches in the substrate recognition helices of hammerhead ribozymes on binding and catalysis," Nucleic Acids Research 23:2092-2096 (1995)

EXAMINER	DATE CONSIDERED

	Wianny and Goetz, "Specific interference with gene function by double-stranded RNA in early mouse development," Nature Cell Biol. 2:70-75 (2000)
*	Wickstrom, "Oligonucleotide Treatment of RAS-Induced Tumors in Nude Mice," Mol. Biotechnol., 18:35-55 (2001)
*	Wiechen et al., "Selection of a high activity c-erbB-2 ribozyme using a fusion gene of c-erbB-2 and the enhanced green fluorescent protein," Cancer Gene Therapy 5(1):45-51 (1998)
*	Wincott et al., "Synthesis, deprotection, analysis and purification of RNA and ribozymes," Nucleic Acids Research 23(14):2677-2684 (1995)
*	Wincott et al., "A Practical Method for the Production of RNA and Ribozymes," Methods in Molecular Biology 74:59-69 (1997)
*	Woo et al., "Taxol inhibits progression of congenital polycystic kidney disease," Nature, 368:750-753 (1994)
*	Woolf et al., "Specificity of Antisense Oligonucleotides in vivo," Proc. Natl. Acad. Sci. USA 89:7305-7309 (1992)
*	Wright et al., "An intracellular anti-erbB-2 single-chain antibody is specifically cytotoxic to human breast carcinoma cells overexpressing erbB-2," Gene Therapy 4:317-322 (1997)
•	Wu and Wu, "Receptor-mediated in Vitro Gene Transformation by a Soluble DNA Carrier System," The Journ. of Biol. Chem. 262:4429-4432 (1987)
*	Wu et al, "Cardiac defects and renal failure in mice with targeted mutations in Pkd2," Nat. Genet., 24:75-78 (2000)
*	Wu-Pong et al., "Nucleic Acid Drug Delivery, Part 2; Delivery to the Brain," BioPharm 32-38 (1999)
*	Wu-Pong, "Oligonucleotides: Opportunities for Drug Therapy and Research," BioPharm pp20-33 (1994)
*	Yamada et al., "Nanoparticles for the delivery of genes and drugs to human hepatocytes," Nature Biology, Published online: 29 June 2003, doi:10.1038/nbt843 (August 2003 Volume 21 Number 8 pp 885-890) (2003)
*	Yan et al., "Membrane-anchored Aspartyl Protease with Alzheimer's Disease β-Secretase Activity," Nature 402:533-537 (1999)
*	Yang et al., "Hydrodynamic injection of viral DNA: A mouse model of acute hepatitis B virus infection," PNAS, 99, 21, 13825-13830 (2002)
*	Yu et al., "A Hairpin Ribozyme Inhibits Expression of Diverse Strains of Human Immunodeficiency Virus Type 1," Proc. Natl. Acad. Sci. USA 90:6340-6344 (1993)
•	Yuan et al., "Targeted cleavage of mRNA by human RNase P," Proc. Natl. Acad. Sci. USA 89:8006-8010 (1992)
•	Yuqiang et al., "Site-specific cleavage of oncogene Ki-ras mRNA by ribozyme in vitro," J. Med. Coll. PLA 14:25-28 (1999)
*	Zamore et al., "RNAi: Double-Stranded RNA Directs the ATP-Dependent Cleavage of mRNA at 21 to 23 Nucleotide Intervals," Cell 101:25-33 (2000)
	*

EXAMINER	DATE CONSIDERED
	·

JDS	*	Zarrinkar and Williamson, "The P9.1-P9.2 peripheral extension helps guide folding of the Tetrahymena ribozyme," Nucleic Acids Research 24:854-858 (1996)
1	•	Zaug et al., "The Tetrahymena Ribozyme Acts Like an RNA Restriction Endonuclease," Nature 324:429-433 (1986)
	•	Zhang et al., "Anti-K-ras Ribozyme Adenoviral Vector for Gene Therapy of Non-Small Cell Lung Cancer," Methods Mol. Med., 35:261-271 (1999)
	•	Zhang et al., "Anti-tumorigenic effect of a K-ras ribozyme against human lung cancer cell line heterotransplants in nude mice," Gene Ther., 7:2041-2050 (2000)
	*	Zhang et al., "Generation of a Ribozyme-Adenoviral Vector Against K-ras Mutant Human Lung Cancer Cells," Mol. Biotechnol. 15:39-49 (2000)
	*	Zhang et al., "Inhibition of infection of incoming HIV-1 virus by RNA-cleaving DNA enzyme," FEBS Lett., 458:151-156 (1999)
	*	Zhou et al., "Synthesis of Functional mRNA in Mammalian Cells by Bacteriophage T3 RNA Polymerase," Mol. Cell. Biol. 10:4529-4537 (1990)
	*	Ziche et al., "Angiogenesis Can Be Stimulated or Repressed In Vivo by a Change in GM3:GD3 Ganglioside Ratio," Laboratory Investigation 67:711-715 (1992)
	*	Zimmerly et al., "A Group II Intron RNA is a Catalytic Component of a DNA Endonuclease Involved in Intron Mobility," Cell 83:529-538 (1995)
$\overline{\mathbf{V}}$	*	Zinnen et al., "Chemically Modified siRNAa: Potential Anti-viral Hepatitis Therapeutics" (Abstract) March 2004

	li di
EXAMINER /James Schultz/	ATE CONSIDERED 06/25/2006